

ABSTRACT OF THE DISCLOSURE

The swirling type micro-bubble generating system according to the present invention comprises a container main unit having a cylindrical space with bottom or a megaphone-like space, a liquid inlet provided in tangential direction on a part of circumferential surface of inner wall of said space, a gas introducing hole provided on the bottom of said cylindrical space or opening of said megaphone-like space, and a swirling gas-liquid mixture outlet arranged at the top of said cylindrical space or opening of said megaphone-like space. According to this system, it is possible to readily generate micro-bubbles in industrial scale, and the system is relatively small in size and has simple structure and can be easily manufactured. The system can be used in the applications such as purification of water quality in ponds, lakes, marshes, man-made lakes, rivers, etc., for processing of polluted water using microorganisms, culture of fishes and other aquatic animals, and increase of oxygen and dissolved oxygen in culture solution in hydroponics culture farm and improvement of production yield.

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JP

(71) 出願人 ; および

(72) 発明者

大成博文(OHNARI, Hirofumi)[JP/JP]

〒745-0807 山口県徳山市城ヶ丘三丁目15-20 Yamaguchi, (JP)

(74) 代理人

村田幸雄(MURATA, Yukio)

〒104-0028 東京都中央区八重洲2丁目6番5号

八重洲5の5ビル 東知特許事務所 Tokyo, (JP)

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(54) 発明の名称 旋回式微細気泡発生装置

(57) Abstract

A swing type fine air bubble generating device, comprising a container main body having a bottomed cylindrical space (1) or a megaphone-shaped space of which inlet part is closed, a pressure liquid inlet port (2) provided in a part of the inner peripheral wall surface of the space in tangential direction, a gas inlet hole (4) provided in the bottom part (3) of the cylindrical space or the inlet port of the megaphone-shaped space, and a swing air/liquid mixture outlet port (5) provided in the tip of the cylindrical space or the megaphone-shaped space, whereby the device can produce fine air bubbles easily on industrial scale, be manufactured easily because it is relatively small in size and simple in structure, and be used effectively for purification of water of ponds, lakes, dams, and rivers, for sewage disposal by microorganisms, for cultivation of fishes and aquatic animals, for increase in oxygen and dissolved amount of oxygen contained in hydroponic culture liquid, and for increase in yield rate.

